

## Abstract

## Data transfer method

The present invention relates to a method for transferring data between a secure computer (1), e.g. an error-protected stored-program control (1), and a number of input/output units (2 to 4) via a bus control unit (6) connected to the secure computer (1) and a serial bus system (5), in which the bus control unit (6) cyclically activates the input/output units (2 to 4) connected to the bus system (5) and transfers a multi-bit message (8) to the respective activated input/output unit (e.g. 4). In order to produce a data transfer method which enables security-related signals to be transmitted via a non-error-protected bus system (5), it is proposed according to the invention, that

- at least one of the input/output units (4) is designed as a security unit (4),
- the multi-bit message (8) transferred to the security unit (4) has at least one checkbit, and
- the security unit (4) interprets the transferred multi-bit message (8) as correct only if the checkbit alternates within a predefined monitoring period.

FIG 3